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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/714,514	11/17/2000	Darko Pervan	003300-700	5020

21839 7590 07/13/2005

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EXAMINER

A, PHI DIEU TRAN

ART UNIT	PAPER NUMBER
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3637

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/714,514

Applicant(s)

PERVAN, DARKO

Examiner

Phi D. A

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>6/28/05</u> . | 6) <input type="checkbox"/> Other: _____ |

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14, 16-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriau et al (6006486) in view of Meyerson (5349796) and Terbrack et al (4426820).

Moriau et al (figure 23-25) shows a locking system for mechanical joining of floorboards, the locking system comprising a tongue and groove joint, the groove and tongue of which have cooperating upper abutment surfaces and cooperating lower abutment surfaces for vertical locking of the two joint edges of two adjacent floorboards, the upper abutment surfaces extending in a first plane parallel to a principal plane of the floorboards, the locking system comprising, for horizontal mechanical joining of the joint edges perpendicular to the joint edges, a locking groove(10) formed in an underside of a first one of the floorboards and extended in parallel therewith and spaced from the joint edge, a portion projecting from a second one of the floorboards, the portion supporting at a distance from the joint edge, a locking element (9) cooperating with the locking groove, the tongue is anglable into the groove, the locking element is insertable into the locking groove by mutual angular motion of the floorboards about upper portions of the joint edges, in a joined state, the cooperating upper abutment surfaces are in contact with each other and are limited horizontally inwards from the joint edge and horizontally outwards to the joint edge by an inner vertical plane and an outer vertical plane respectively, at least a portion of the lower abutment surfaces (34)are positioned outside the outer vertical plane,

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the lower abutment surfaces are located at least partially outside a vertical joint plane (84) which is defined by adjoining upper portions of the joined joint edges of the two floorboards, the major part of the lower abutment surfaces is positioned outside the vertical joint plane, the projecting portion(9) and the groove(10) are arranged in one and the same joint edge of the floor board, the projecting portion is at least partially made in one piece with a body of the floorboard, the locking element (9) of the projection portion is positioned on a level with or toward an underside of the floorboard from the lower abutment surface of the groove(surface at 73), the projecting portion is at least partially formed of a material other than that of a body of the floorboard (the cover 7), the projecting portion is at least partially formed of a separate strip (the cover 7) which is integrally connected with the board by being mounted in the factory, the projecting portion is resilient transversely of the principal plane of the floorboards, the tongue is insertable into the groove and the locking element is insertable into the locking groove by a mutual horizontal joining of the joint edges of the boards, the projecting portion, in a horizontal direction between the lower abutment surfaces of the tongue and groove joint on the one hand and the locking element of the projecting portion on the other hand, has a lower portion which is positioned toward an underside of said floorboard from said lower abutment surfaces, the tongue is anglable into the groove and the locking element is insertable into the locking groove by the mutual angular motion of the boards about upper portions of the joint edges while the upper portion are held in mutual contact, the board being provided along one or more sides with the locking system (figure 1), the floorboard having opposite long sides and short sides and which is mechanically joinable along each long side with a long side of an identical floorboard by downward angling and which is mechanically joinable along each short side with a short side of

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an identical floorboard by displacement along the long sides, the locking system is on each of our edges of a floorboard (inherently so for the boards to be able to join), the projecting portion is resilient, the strip is resilient, all the lower abutment surfaces are positioned outside the outer vertical plane, the upper abutment surface of the locking element is below the second plane, the cooperating upper abutment surfaces are at least partially displaced from the cooperating lower abutment surfaces in a displacing direction parallel to the principle plane of the boards, at least a portion of the lower cooperating abutment surface (the part of 78 which mates with the curving bottom of part 9) is horizontally inward from the vertical joint plane defined by a contacting portion of two juxtapose upper portions of the floorboards, a first juxtaposed upper portion on a first one of the floorboards and a second juxtaposed upper portion on a second one of the floorboards, at least a portion of the lower cooperating abutment surface is between the outer vertical plane and a vertical joint plane defined by a contacting portion of two juxtaposed upper portions of the floorboards, a first juxtaposed upper portion on a first one of the floorboards and a second juxtaposed upper portion on a second one of the floorboards, the projecting portion (9) is at least partially made in one piece with a body of the floorboard, wherein in the joined state, the cooperating lower abutment surfaces are in contact with each other, an upper most surface (88, figure 22) is spaced apart from surfaces of the locking groove, a distal most surface of the locking element (82) is spaced apart from surfaces of the locking groove, the entire projecting portion is made in one piece with a body of the floor board.

Moriau et al does not show the lower abutment surfaces extending in a second plane essentially parallel to the principal plane of the floorboards, the tongue and groove joint is so designed that there is in the groove between the inner vertical plane and the outer vertical plane

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and below the tongue, a space which extends horizontally from the inner vertical plane and at least halfway to the outer vertical plane, an angling state, the tongue and groove is further so designed that the floorboards during a final phase of an inwards angling when the locking element is inserted into the locking groove can take a position where there is space in the groove between the inner and outer vertical plane and below the tongue.

Meyerson (figures 2, 11) shows the tongue and groove joint is so designed that there is in the groove between the inner vertical plane and the outer vertical plane and below the tongue, a space (the opening above the edge 29 and between parts 11, 12) which extends horizontally from the inner vertical plane and at least halfway to the outer vertical plane, and at an angling state, the tongue and groove is further so designed that the floorboards during a final phase of an inwards angling when the locking element is inserted into the locking groove can take a position where there is space in the groove between the inner and outer vertical plane and below the tongue.

Terbrack et al shows a lower abutment surface(7) extending in a second plane essentially parallel to the principal plane of the floorboards.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Moriau et al to show the lower abutment surfaces extending in a second plane essentially parallel to the principal plane of the floorboards as taught by Terbrack et al, the tongue and groove joint is so designed that there is in the groove between the inner vertical plane and the outer vertical plane and below the tongue, a space which extends horizontally from the inner vertical plane and at least halfway to the outer vertical plane, an angling state, the tongue and groove is further so designed that the floorboards during a final phase of an inwards angling

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when the locking element is inserted into the locking groove can take a position where there is space in the groove between the inner and outer vertical plane and below the tongue as taught by Meyerson because having the lower abutment surface being plane essentially parallel to the principal plane of the floorboard would enable the secured fastening of the floor boards together as taught by Terbracke et al, and having the tongue and grooves joint being so designed that there is in the groove between the inner vertical plane and the outer vertical plane and below the tongue, a space which extends horizontally from the inner vertical plane and at least halfway to the outer vertical plane, an angling state, the tongue and groove is further so designed that the floorboards during a final phase of an inwards angling when the locking element is inserted into the locking groove can take a position where there is space in the groove between the inner and outer vertical plane and below the tongue it would enable the easy angling insertion of the parts together as taught by Meyerson.

Per claims 2-5, Moriau et al as modified by Meyerson and Terbrack et al shows the space in the joined state is horizontally extended below the tongue all the way from the inner vertical plane to the outer vertical plane so that no part of the lower abutment surfaces is positioned inside the outer vertical plane, the space during the final phase of the inwards angling is horizontally extended below the tongue all the way from the inner vertical plane to the outer vertical plane, the groove in the joined state having an upper and a lower horizontal surface which constitute inwardly directed extensions of the upper abutment surface and the lower abutment surface respectively of the groove, wherein there is in the joined state a horizontal play between a bottom of the groove and a tip of the tongue, the outer vertical plane is located at a

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horizontally distance inside a vertical joint plane which is defined by adjoining upper portions of the joint edges of the two floorboards.

3. Claim 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriau et al (6006486) in view of Meyerson (5349796) and Terbrack et al as applied to claim 14, above and further in view of Frost et al (2398632).

Moriau et al as modified shows all the claimed limitations except for the groove having in upper part a beveled portion for guiding the tongue into the groove.

Frost et al (figure 1) further shows a beveled portion (the curving portion at the beginning of the groove) for guiding the tongue into the groove.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Moriau et al to show the groove having in upper part a beveled portion for guiding the tongue into the groove because it would enable easy angling insertion of the tongue into the groove as taught by Frost et al.

Response to Arguments

4. Applicant's arguments with respect to claims 1-30 have been considered but are moot in view of the new ground(s) of rejection.

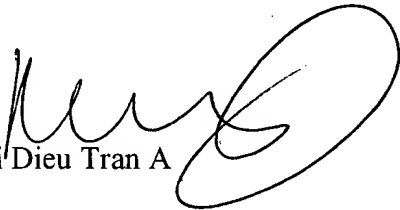
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Tuesday, Thursday and Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lanna Mai can be reached on 571-272-6867. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Phi Dieu Tran A

7/11/05